DOCUMENT RESUME

ED 090 343 UD 014 161

AUTHOR	McWilliams, Joyce H.; Wells, Veronica
TITLE	Title IV-A Works Toward Total Child Development: John B. Gordon Elementary School, 1972-73. Research and Development Report, Volume 7, Number 25, December, 1973.
INSTITUTION	Atlanta Public Schools, Ga.
PUB DATE	Dec 73
NOTE	58p.
EDRS PRICE	MF-$0.75 HC-$3.15 PLUS POSTAGE
DESCRIPTORS	Career Education; *Child Development; Community Involvement; *Compensatory Education Programs; Educational Diagnosis; *Elementary Schools; Family Counseling; Family School Relationship; Inservice Teacher Education; Kindergarten Children; Preschool Children; *Urban Schools
IDENTIFIERS	Comprehensive Instructional Program; Elementary Secondary Education Title IVA; ESEA Title IVA; *Georgia

ABSTRACT

Gordon Elementary School had three supplementary programs during 1972-73 which were funded by federal, state, and local monies. Title IV-A is a federally funded program based on a "total family" approach to treating problems of the child and his education. Health, recreation, and physical fitness; remediation; family counseling; cultural enrichment; arts and crafts; occupational training and family life skills; breakfast and snack; and library services are representative of the avenues which Title IV-A is creating to upgrade the quality of family life and community participation in childhood development. Of the pupils enrolled at Gordon 85 percent met original Title IV-A criteria for low-income family educational assistance as defined by a sliding income scale which varied with family size. The Title IV-A program was limited to serving 40 preschool children, ages three and four, and 64 school-age children in grades kindergarten through seventh. The Comprehensive Instructional Program is a locally developed and funded project. Its purpose is to provide diagnostic measures and inservice training for teachers to insure pupil development in reading and math, and to define and establish a base professional competency level for teachers. Tests are provided to teachers for diagnostic testing several times a year. CIP has also developed a set of proficiency modules which will help develop teaching skills in reading for all classroom teachers. The Comprehensive Career Education Model consists of instructional units incorporated into the regular classroom instruction. (Author/JM)

ED 090343

RESEARCH AND DEVELOPMENT REPORT

Vol. VII, No. 25 December, 1973

TITLE IV-A WORKS TOWARDS TOTAL CHILD DEVELOPMENT

JOHN B. GORDON ELEMENTARY SCHOOL
1972-73

Miss Joe E. Tinch
Title IV-A Lead Teacher

Charles William Pepe
Principal

Prepared by

Joyce H. McWilliams
Acting Research Assistant

Veronica Wells
Statistician

Dr. Jarvis Barnes
Assistant Superintendent
for Research and Development

Dr. Alonzo A. Crim
Superintendent

Atlanta Public Schools
224 Central Avenue, S.W.
Atlanta, Georgia 30303

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

UD 014 184

TABLE OF CONTENTS

	Page
INTRODUCTION	1
SUPPORTIVE PROGRAMS	
Title IV-A	2
Comprehensive Instructional Program	3
Comprehensive Career Education Model	3
CRITICAL VARIABLES	4
NEEDS, GOALS, BEHAVIORAL OBJECTIVES, AND DIAGNOSTIC MEASURES	4
ORGANIZATION AND CONTROL	6
PROCESS AND MANAGEMENT	7
Comprehensive Career Education Model	8
Title IV-A	10
Comprehensive Instructional Program	11
EVALUATION	
Research Design	12
Findings	13
Kindergarten Performance on Basecheck	13
Academic Achievement on the Iowa Tests of Basic Skills	13
Achievement Quotients and Percentiles	17
Self-Concept and Attitude Toward School	19
Preschool, Child Development	20
Career Education	22
Attitudes Toward Education and Individualization	23
COST ANALYSIS	24
CONCLUSIONS	26
RECOMMENDATIONS	27
APPENDIX A METROPOLITAN ACHIEVEMENT TESTS SCORES FOR FIVE YEARS	
APPENDIX B SOUTHERN REGIONAL EDUCATION BOARD RATING BOOKLET	

LIST OF TABLES

NUMBER		PAGE
1	Kindergarten Basecheck Scores	14
2	Placement of Pupils, By Grade Level, on the Iowa Tests of Basic Skills Reading and Mathematics Scores	15
3	Placement of Pupils, By Grade Level, on the Iowa Tests of Basic Skills Composite Scores	16
4	Iowa Tests of Basic Skills	18
5	Mean Percentage Ratings for Southern Regional Education Board Checklist Scores	21
6	Mean Score on Opinionnaire on Attitudes Toward Education	24
7	Cost Analysis	25

I. INTRODUCTION

John B. Gordon Elementary School is located at 1205 Metropolitan Avenue, S. E., in the East Atlanta section of Atlanta. The immediate community was once an active and prosperous business area, which has been in a decaying process for several years. In most recent times, there has been constant migration into and out of the community, and a shift in the ethnic composition from a totally white to a majority black area.

The present principal was assigned to Gordon in the fall of 1970. The average daily attendance at Gordon peaked in 1969, at 638, and then declined to 585 in 1970, and 541 in 1971, and rose to 575 in 1972, and 593 in 1973. The mobility index, or ratio of pupils moving into and out of the school, to average daily attendance, has ranged from 0.41 in 1969-70, to 0.52 in 1970-71, to 0.59 in 1971-72, to 0.36 in 1972-73.

Academic achievement has been a major problem during the population shift. Although the enrollment has not dropped radically, the black/white ratio went from 50/50 in 1969-70 to 65/35 in 1970-71 to 75/25 in 1971-72. The school year 1972-73 started at about 75 per cent black and 25 per cent white. At this time, there was little of the racial tension that was evident in past years. The black/white ratio was more evenly balanced in lower grades than in upper grades, which were almost entirely black. Those white pupils remaining in the Gordon community seemed to want to attend that particular school. The problem of social adjustment, which could be seen in suspicion and some hostility between the ethnic groups during the transitional period, was essentially eliminated and focus was brought to raising the academic achievement and interpersonal and intrapersonal abilities of the pupils.

Last year, Gordon School averaged nearly 93 per cent attendance, reversing the downward trend of previous years. Fifty-six students, or 10 per cent of the student body, had 100 per cent attendance. The faculty, through its participation in an inservice group development course, seemed to be working much more cooperatively toward stabilizing and attaining a good educational goal for the children who attended Gordon. They felt they had "turned the corner" on the racial issues that manifested themselves during the transitional years. Although the school neighborhood was still in a state of transition, this was rapidly declining. Emergency School Assistance Program (ESAP) funds were used two years ago to purchase recorders, listening stations, film loops, typewriters, and guitars, and continued availability of this equipment enabled the staff to add to the children's accomplishments and self-image. The equipment remained with the school after the ESAP program phased out, and was still being used as part of the school program.

The gains made by the lower grades were improving yearly, but the upper grades still were not achieving satisfactorily. Mobility and socioeconomic factors, no doubt, contributed to poor pupil performance on standardized achievement tests. Therefore, along with a staff commitment to combat these unavoidable environmental factors, it was felt that other criteria for measuring pupil success should be added to traditional test score results. The California Test of Personality (CTP) was chosen as an additional measure to be used in conjunction with the Iowa Tests of Basic Skills (ITBS) scores.

II. SUPPORTIVE PROGRAMS

The purpose of supplementary programs is to enhance and expand existing school services; to provide a vital link between school, parent, and community; and to help achieve the stated goals and objectives of the school. Gordon Elementary School had three such supplementary programs during 1972-73 which were funded by federal, state, and local monies.

A. Title IV-A

Title IV-A is a federally funded program based on a "total family" approach to treating problems of the child and his education. Health, recreation, and physical fitness; remediation; family counseling; cutlural enrichment; arts and crafts; occupational training and family life skills; breakfast and snack; and library services are representative of the avenues which Title IV-A is creating to upgrade the quality of family life and community participation in childhood development. Eighty-five per cent of the pupils enrolled at Gordon met original Title IV-A criteria for low-income family educational assistance as defined by a sliding income scale which varied with family size.

The 1972-73 school program at Gordon was to have included comprehensive child day care, family living skills, family counseling, remedial education and enrichment services, cultural enrichment, food services, and transportation. However, because of a cutback and freeze on remaining funds, the Title IV-A program was limited to serving 40 preschool children, ages three and four, and 64 school-age children in grades kindergarten through seventh.

B. Comprehensive Instructional Program

The Comprehensive Instructional Program (CIP) is a locally developed and funded project. Its purpose is to provide diagnostic measures and inservice training for teachers to insure pupil development in reading and math, and to define and establish a base professional competency level for teachers. Tests are provided to teachers for diagnostic testing several times a year. CIP has also developed a set of proficiency modules which will help develop teaching skills in reading for all classroom teachers.

C. Comprehensive Career Education Model

The Comprehensive Career Education Model (CCEM) consists of instructional units which have been jointly created and defined by school and community personnel, and by the Center for Vocational and Technical Education, Ohio State University. Students, teachers, and other involved personnel are encouraged to contribute to the improvement of the units, and to pilot and field test activities. Atlanta is one of seven school systems throughout the country participating in the development and field testing of the Comprehensive Career Education Model. Career education implies a structured career orientation and preparation program for every student as an integral part of their academic course work throughout the school and college years. Many students now exit the educational system without the skills necessary for successful pursuit of their chosen life roles. Evaluation of this year's program was coordinated by area personnel involved in CCEM, and the teachers and students field testing the units. CCEM units were incorporated into the regular classroom instruction.

III. CRITICAL VARIABLES

The faculty and staff of Gordon, through observation of classroom and cafeteria behavior, play, and standard testing procedures, identified the following variables as those most critical to success in meeting the needs of the pupils.

A. Reading skills.

B. Communication skills.

C. Quantitative skills.

D. Self-concept.

E. Social behavior.

F. Comprehensive child day care.

IV. NEEDS, GOALS, BEHAVIORAL OBJECTIVES, AND DIAGNOSTIC MEASURES

The critical variables identified areas of desired program development and highlighted the needs of the pupils. In order to meet these needs and to evaluate the program and progress, the following needs, goals, behavioral objectives, and diagnostic measures were employed.

A. Need: Development and improvement in basic reading skills.

Goal: To provide individualized learning experiences through which pupils would develop specific reading skills according to individual needs and capabilities.

Behavioral Objective: At least 50 per cent of the pupils in grades one through seven would score at grade level in reading. The remaining pupils would score within six months of grade level in reading.

Diagnostic Measure: Scores on the Iowa Tests of Basic Skills (ITBS) given in the spring, 1973.

B. Need: Development of mathematics skills and understanding of math concepts.

Goal: To provide individualized learning experiences to help pupils to develop mathematics skills and understanding of mathematics skills concepts.

Behavioral Objective: At least 50 per cent of the pupils in grades one through seven would score at grade level in mathematics. The remaining pupils would score within six months of grade level in mathematics.

Diagnostic Measure: Scores on the Iowa Tests of Basic Skills (ITBS) given in the spring, 1973.

C. Need: Development of a better understanding of and a better working relationship to the society in which the pupils live.

Goal: To provide pupils with meaningful experiences which relate to those things about which they read, and with which they interact.

Behavioral Objective: Pupils would demonstrate an increased awareness of their future place in society as a whole, and the options available in selecting career goals.

Diagnostic Measure: Teachers who were field testing different curriculum units of the Comprehensive Career Education Model (CCEM) were to measure their pupils on this variable. Measures used were to be a Student Information Form, a Unit Pretest, a Lesson Embedded Item Summary Form, a Unit Posttest, and a Unit Questionnaire.

D. Need: Comprehensive child day care.

Goal: To provide comprehensive day care services for children.

Behavioral Objective: Given the opportunity to participate in a 12-month child development program, three- and four-year-old children from low-income familes would develop positive self-image, oral language skills, and concept formation above that of children without child development experiences.

Diagnostic Measure: The Southern Regional Education Board (SREB) rating scale.

Behavioral Objective: Given the opportunity to participate in an extended day care program while being properly supervised by day care workers, kindergarten and school-age children would show significant improvement in self-concept and social skills.

Diagnostic Measure: The California Test of Personality (CTP).

V. ORGANIZATION AND CONTROL

The organization of the Atlanta Public Schools is administered by the Superintendent of the Atlanta Public Schools, who is appointed by the Board of Education and is authorized by the Board to administratively direct the instructional program of the school system. There are five area superintendents who, under the guidance of the superintendent, are administratively responsible for all school programs. The area superintendent of each geographic area supervises principals of the schools in that area. Also, within the organizational structure of the local school system, there are six assistant superintendents who direct the six divisions of supportive services to the instructional program. The four divisions having the most direct impact on the instructional opportunities provided to children were (1) Research and Development, (2) Instruction, (3) Personnel, and (4) Administrative Services.

The Assistant Superintendent for Research and Devlopment and his staff were responsible for developing new programs, evaluating the effectiveness of program activities, and disseminating information.

The Assistant Superintendent of Personnel and his staff assumed the responsibility of meeting the staffing needs of the instructional programs within the schools and project activities.

Inservice training for teachers, staff development, and curriculum development were directed by the Assistant Superintendent for Instruction and his staff. Within this division, the directors and coordinators of federal, state, and local projects and various curriculum areas worked with principals and the teachers to implement programs and provide for the training needs of the school personnel.

The Area Superintendent and his staff were administratively responsible for the schools within a specific geographic area. His staff supervised and worked directly with Gordon school staff in implementing the instructional program of the school.

In addition to principal, who was responsible for administrative aspects of the school program at the local level, there were 20 classroom teachers who were directly responsible for classroom instruction and assessment of pupils. Other personnel serving the school included a librarian, three resource teachers, parttime teachers in art and music; and a lead teacher, two group leaders, two aides, and a half-time family service worker who were responsible for the functioning of the Title IV-A day care center.

VI. PROCESS AND MANAGEMENT

The Gordon classrooms are self-contained and the primary curriculum -- first, second, and third grades -- is ungraded. There were twenty-three classrooms and twenty-four teachers in 1972-73. There were three classrooms each of first through fifth grades and two classrooms each of sixth and seventh grades. The teachers in each grade met as a group for weekly planning, and identified needs, goals, and objectives for the pupils. The three resource teachers included a teacher for the gifted and two teachers for the educable mentally retarded students.

In summary, Gordon had the following staff available to carry out its programs:

Title	Number	Funding	Assignment
Principal	1	General	Administers total school program.
Classroom Teacher	20	General	Kindergarten -- seventh grade.
Resource Teacher	3	General	Teach 2 educable mentally retarded (EMR) classes and one class for the gifted.
Librarian	1	General	Administers library use program.
Arts Teacher	1	General	Part time
Music	1	General	Part time

Title	Number	Funding	Assignment
Lead Teacher	1	Title IV-A	Directs and leads day care center, plans inservice, responsible for maintenance and procurement of equipment, organizes community participation, and works with resource staff.
Group Leader	2	Title IV-A	Responsible for group of children under leadership of the teacher and supervises aides.
Aide	2	Title IV-A	Assist group leaders in care of group and keep records.
Family Service Worker	1	Title IV-A	Half time. Works with the total family and preschool and extended day pupils and helps family parenting skills development.

Inservice activities were scheduled for staff meetings each Tuesday.

Comprehensive Career Education Model

The teacher who was released as building representive to the Comprehensive Career Education Model (CCEM) program coordinated the units' presentation into the classrooms, ordered materials and films, and was the communication link between the school and CCEM. Two CCEM presentations were made at monthly PTA meetings, but parents' support was not initially strong. Lack of community cohesiveness had been recognized as a school problem, and the school tried to draw parents and area residents' support in its programs. Several projects were discussed through PTA, and after the CCEM units had been used in the classroom, parents were reportedly pleased with what the pupils were learning from them. (The Title IV-A preschool also helped the community become aware of facilities and programs which were beneficial in child development and available at Gordon in addition to the traditional "3 R's".)

The CCEM field-test plan did change during the latter part of the year. In the original experimental classrooms, a unit was taught, an evaluation booklet completed, and pretests and posttests administered. Comparison classrooms administered the pre- and posttests, taught the unit, but did not complete an evaluation booket. This experimental design was revised to be able to verify that growth between pretests and posttests was a result of the unit being taught. Therefore, under the revised plan, the experimental classrooms remained the same, but control classrooms were given only the pretest and posttest. No units were taught, and evaluation booklets were not completed.

Following is the program for the classrooms at Gordon which participated in the CCEM field tests under both the initial and revised experimental designs. Unit names and class grades are included.

Initial Design

Unit Name	Grade	Number of Classes
Workers Around Us	Kindergarten	1
Learning About Business	Second	3
Berries, Gold and Credit Cards	Second	1
Supermarket Helpers	Third	1
Attitudes and Test Completion	Second	1
Community Workers	Second	2
Activities, Roles, and Occupations	Second	1
Developing Locomotor Skills	First	3

Revised Design

Career Exploration in the Life Sciences	Seventh	1 experimental and 1 control
Career Exploration: Education Cluster	Seventh	1 experimental and 1 control
Economic Education (A)	Third	1 control
Economic Education (B)	Third	2 control
Supermarket Helpers	Third	1 experimental
Making Toys Through Teamwork	Fourth	1 experimental and 1 control

The teacher at Gordon responsible for introducing and coordinating the units was also chairperson of the city unit-evaluation committee, composed of CCEM-released teachers. It was reported that in almost every school the units were enthusiastically received by both pupils and teachers. The one negative response voiced by many teachers was the rigid time schedule which they were required to follow in teaching the units.

Although CCEM will not have a staffed program in operation during 1973-74, the Gordon faculty has decided to continue using the units and materials supplied in 1972-73, and was making plans to screen some of the 180 or so additional units which will be on file at the Instructional Services Center. Even the preschool reported having used some of the CCEM materials; the unit Workers Around Us created great involvement as community workers were invited in to speak to the children.

Title IV-A

The Title IV-A day care center began full operations on January 22, 1973. Most of the staff were on board by October 23, 1972, and preservice training, classroom renovations, and recruiting kept the lead teacher, two group leaders, four aides, and family service worker quite busy. The December 15, 1972, cutback in funding increased the original 30 preschool slots to 40, and cut two aides from the staff. It also required that day care for eligible school-age children be provided by existing preschool day care staff. Sixty-four school-age participants' spaces were assigned to Gordon, but from February to June an average of only three pupils were in the program. This was due largely to lack of staff, but an important factor was lack of parental interest.

The Title IV-A lead teacher attended a three-week preservice course in the UEC curriculum held at Cook Center. During the rest of the preopening time at Gordon, she herself conducted the preservice for the rest of the staff in orientation to school resources and procedures, daily class planning, use of preschool materials, and role playing. One of the group leaders was a licensed Red Cross first aid instructor, and she gave the course to the rest of the staff. Three of them received official completion cards.

In October the staff of the preschool went to two workshops -- one at the public library on storytelling and making tissue paper puppets, and one at the Area V Office on use of preschool materials. In November, yet another workshop was held on Teaching and Learning Through Movement.

The main reason for delay in opening the center was incompleted renovations. The center was opened in January even though the doors still opened the wrong way. It was decided then that the doors would be left as they were.

A parent advisory committee was organized in the fall, after recruitment had identified the 30 children originally to be in the preschool. After the December cutback, many of these children were no longer eligible, and as a consequence, the parent advisory committee disbanded and was to reorganize when the new participants were identifed and the center opened. However, further revisions in eligibility made additional changes likely, so a functioning group was not realized in 1972-73. It is expected that by September, 1973, a parent advisory committee will have been organized.

The lead teacher attended weekly staff meetings with other lead teachers and family service workers at the Area V Office. These meetings were organizational and procedural in nature, but occasionally outside speakers were presented.

Preschool children were given a balanced program of cognitive, emotional, social and motor development activities, along with rest and play. Most of the supplies and equipment were received as requested, and the small center also acquired a used stove and refrigerator from an area high school.

Comprehensive Instructional Program

The Comprehensive Instructional Program (CIP) diagnostic tests were administered in October, January, and March, to the first, second, and third grades. Printouts provided to each teacher contained information on items missed by each pupil by level (A through D) and by subtest. These data were charted and used by the teachers in devising individualized and group ability plans for pupils.

VII. EVALUATION

Research Design

Procedures used to evaluate pupil performance and development were based on the following research design:

A. The scores of kindergarten pupils, on Basecheck, fall administration, are presented to determine a baseline entry level in abilities and skills.

B. Data from the spring administration of the Iowa Tests of Basic Skills (ITBS) are used to ascertain if, in fact, at least fifty per cent of the pupils scored at grade level in reading and in mathematics, and if the remaining pupils scored within six months of grade level.

C. Data from the predicted achievement quotient/national achievement quotient scores are reported and discussed.

D. Data from a pretest/posttest administration of the California Test of Personality (CIP) were to have been used to determine significant improvement in self-concept and attitude toward school.

E. Scores of the Southern Regional Education Board (SREB) checklist are reported and evaluated to show effects of the Title IV-A preschool on children aged two to four.

F. The Comprehensive Career Eduation Model (CCEM) program is discussed.

G. The Opinionnaire on Attitudes Toward Education was administered to the faculty to determine staff favorability toward individualization of instruction and individual growth and learning as measured in attitudes toward child-centered policies and practices in education. A correlation between all tested schools' scores and their Predicted Achievement Quotient/National Achievement Quotient (PAQ/NAQ) data was made to determine if a significant relationship existed, and this data is reported.

Findings

A. Kindergarten Performance on Basecheck

The Basecheck is a checklist designed for use with kindergarten children, and for diagnosis of first grade children lacking kindergarten experience. The purpose for its administration is to profile skill abilities considered basic to beginning reading; it provides information very helpful to the teacher in planning learning experiences. High scores indicate a good reading readiness foundation. The five subtest areas are self-concept, language, visual perception, auditory perception, and number concepts. The test is administered in the fall and spring to all kindergarten pupils in Atlanta Public Schools. There are 100 possible points for kindergarten, and 126 possible points for first graders to score. Only the pretest (fall) was given at Gordon in 1972-73, because a mid-year change in kindergarten teachers resulted in an administration error.

In the fall evaluation, the mean entry level score was 51.43. The range of scores was from 29 to 80. Subtest mean scores, and their percentage of total subtest scores, are shown in Table 1. Language subtest had the highest mean, and visual perception the lowest mean -- about half that of the language subtest. These diagnostic scores will provide baseline data with which to compare nonpreschool and former preschool pupils who will be entering kindergarten in the fall of 1973. It will be very important for justification of preschool activities and expenditures if it can be shown in 1973-74 that while mean scores of nonpreschool pupils are comparable to prior 1972-73 scores, mean scores of former preschool pupils are significantly higher than 1972-73 scores, as well as higher than 1973-74 scores of nonpreschoolers.

B. Academic Achievement on the Iowa Tests of Basic Skills

The Iowa Tests of Basic Skills (ITBS) are concerned with the fundamentals essential to success in any type of school work. It stresses use of acquired skills, rather than formal facts or rules to be memorized. The five major areas tested are:

Vocabulary	Knowing the meaning of words.
Reading	Understanding what is read.
Language	Spelling, capitalization, punctuation, usage.
Work-study skills	Map reading, graphs, tables, alphabetization, using index, dictionary skills, etc.

Mathematics — Understanding number systems, math terms and operations, and solving problems.

Gordon placed much emphasis on development of language arts and communications skills. A specific period in each class each day was set aside for reading instruction, and other language skills were integrated into all aspects of the curriculum.

TABLE 1

KINDERGARTEN BASECHECK SCORES
(N=39)

Subtests	Subtest Number of Items	Subtest Mean Scores	Subtest Percentage Means
Language	44	29.26	66.5
Visual Perception	19	6.36	33.5
Auditory Perception	17	7.87	46.3
Number Concepts	20	8.25	41.3
Total	100	51.43	51.4

Major school objectives, then, were to reverse the downward scoring trend of the past five years and to see at least fifty per cent of the pupils score at or above grade level in mathematics and in reading, and the remaining pupils score within six months of grade level. As can be seen in Table 2, none of the grades achieved 50 per cent at grade level on either reading or mathematics. The first grade did, however, have 84 per cent in reading and 72 per cent in mathematics score within six months of grade level or above.

TABLE 2

PLACEMENT OF PUPILS, BY GRADE LEVEL, ON THE IOWA TESTS OF BASIC SKILLS READING AND MATHEMATICS SCORES

			Reading Comprehension			Total Mathematics		
Grade	N	National Norm Level	Percentage at or Above Grade Level	Percentage Within 6 Months	Percentage Below 6 Months	Percentage at or Above Grade Level	Percentage Within 6 Months	Percentage Below 6 Months
1	68	1.7	37	47	16	29	43	28
2	61	2.7	14	30	56	13	36	51
3	82	3.7	20	26	54	12	17	71
4	75	4.7	19	27	54	9	16	75
5	78	5.7	9	6	85	10	12	78
6	50	6.7	10	8	82	8	16	76
7	67	7.7	4	9	87	1	4	95

The second, third, and fourth grades had nearly 50 per cent scoring within six months of grade level or above in reading, and the second grade came very close to 50 per cent scoring within six months of grade level or above in mathematics. It is easy to discern the distinct downward trend in scores as grade level increases. Table 3 shows the composite scores on the ITBS. While the composite score includes some subtests other than reading and mathematics, thereby not being just an average of those two scores, the results are quite similar to those of the two separate areas.

TABLE 3

PLACEMENT OF PUPILS, BY GRADE LEVEL, ON THE IOWA TESTS OF BASIC SKILLS COMPOSITE SCORES

Grade	N	National Norm Grade Level	Percentage at or above Grade Level	Percentage Within 6 Months of Grade Level	Percentage Below 6 Months of Grade Level
1	65	1.7	26	51	23
2	61	2.7	15	28	57
3	82	3.7	17	10	73
4	73	4.7	16	12	71
5	73	5.7	8	15	77
6	41	6.7	12	5	83
7	66	7.7	8	3	89

The general staff feeling at this school is that for several years efforts have been concentrated on stabilizing the student body, pulling together community support, and avoiding racial conflicts. Their success has been obvious; Gordon has not been plagued by racial or behavioral disturbances. Now, the emphasis is going to be turning to bear on academic weaknesses. Standardized test scores for the past five years are reported in Appendix A, and although data are not complete, the scores do seem to fluctuate with the mobility

levels. As mobility increased, grade equivalent scores dropped, and as mobility decreased scores were higher. Also, over the three years for which city-wide mean scores were available (68-69, 69-70, 70-71), the difference scores dropped considerably. The mean difference in 1968-69 was +.6 in Gordon's favor; or in other words, Gordon's mean subtest scores were an average of six months higher than the city-wide mean subtest scores. By 1970-71, the difference had dropped to -.091. Individualization and highly motivational exercises, then, are to be the bases from which the new emphasis will operate.

C. Achievement Quotients and Percentiles

The data compiled on Achievement Quotients and Percentiles are shown in Table 4. The Predicted Achievement Quotient (PAQ) equals the actual achievement divided by predicted achievement. Six factors were used in the model from which predictions of pupil performance was made. The weights of these factors were statistically determined by a linear multiple step-wise regression. The equation resulting from this technique was applied to each grade to determine the predicted performance level of that grade. The six factors were: (1) scores on the Metropolitan Achievement Tests administered in April, 1972, (2) the socioeconomic level of the community, (3) mobility rates (or ratio of pupil movement in and out of the school to average daily attendance), (4) attendance, (5) pupil-teacher ratio, and (6) per cent of pupils passing.

The predicted scores were achieved by the third and fourth grade in reading. None of the grades achieved predictions in mathematics. As can be seen in Table 4, however, all grades except the second achieved at least 90 per cent of their predicted scores in reading and in math.

The National Achievement Quotient (NAQ) is the actual achievement divided by the national norm. None of the grades performed at 90 per cent or better of the national norm, on either reading, mathematics, or the composite test results.

TABLE 4

IOWA TESTS OF BASIC SKILLS
APRIL, 1973

Grade	Grade Equivalent Score			Summary Indices	
	Actual	Predicted	National Norm	Predicted Achievement Quotient	National Achievement Quotient
2	1.9	2.0	2.7	95	69
3	2.7	2.6	3.8	105	71
4	3.6	3.3	4.7	107	76
5	3.9	4.0	5.7	97	68
6	4.7	4.7	6.7	99	70
7	4.9	5.2	7.6	93	64
			Average	99	69
			Mathematics Test Data		
2	1.8	2.1	2.6	85	69
3	2.6	2.7	3.7	97	70
4	3.4	3.6	4.7	95	72
5	4.1	4.3	5.6	96	72
6	4.8	5.1	6.6	94	72
7	5.3	5.6	7.6	94	69
			Average	93	70
			Composite Test Data		
2	1.9	2.1	2.6	89	71
3	2.7	2.7	3.7	99	72
4	3.6	3.5	4.7	101	76
5	4.3	4.2	5.7	102	75
6	4.7	4.9	6.7	95	70
7	5.3	5.5	7.6	96	69
			Average	97	72

Based on the composite test data (which includes some areas not subsumed under reading and math), Gordon's average PAQ was 97, and the NAQ was 72. Those figures placed the school in the 46th percentile of Atlanta Public Schools in PAQ, and in the 31st percentile in NAQ . It should be noted, however, than an NAQ of 75 (+3 per cent) would have raised the school to the 44th percentile (+13 on the percentile scale), and that an NAQ of 71 (-1 per cent) would have dropped Gordon to the 26th percentile (-5 on the percentile ranking). An increase of just a few percentage points on the NAQ, then, would have brought the percentile score up considerably. The same holds true for the PAQ.

D. Self-Concept and Attitude Toward School

It is recognized that pupil attitude and motivation are important factors in learning, and as mentioned earlier, Gordon has stressed affective development in their educational program for several years now. It had been planned to administer a pretest-posttest of the California Test of Personality (CT) to a stratified random sample of pupils participating in the Title IV-A extended day care program, and to a similar group of pupils not involved in extended day.

The extended day care program was designed to provide before and after school day care for school-age children. However, the December cutback in funds supporting this program altered the final product such that instead of any of the schools' pupils being able to participate, spaces were alloted only for 64 eligible participants. Between February and June, only three pupils were enrolled in extended day care. It should be noted that more than 20 pupils had been identified and met the revised eligibility guidelines, but no staff was provided for the program and existing personnel in the preschool day care center were stretched to cover as many of the older pupils as possible. Space restrictions in the portable building used by day care and the late start of the program were also significant factors in the low enrollment. It was not known until January that there was, in fact, to be an extended day care program. With the preschool opening at the same time, there were not any personnel free to recruit for extended day participants. It is anticipated that with two additional part-time aides, a part-time teacher, and space in the auditorium the extended day program will be functioning actively in 1973-74.

E. Preschool, Child Development

The Title IV-A day care center opened at Gordon on January 22, 1973. Even with the two changes in guidelines necessitating identification of new sets of eligible children, no difficulty was experienced in filling the 40 allotted spaces. In order to evaluate effectiveness of program delivery, the Southern Regional Education Board (SREB) checklists were administered in March and June, and are reported in Table 5.

The SREB has four major subareas; cognitive, social-emotional, motor skills, and hygiene and self-help. The rating form was revised for 1972-73, and is in a booklet which can be used for seven consecutive ratings and then passed with the child into kindergarten. This format should be helpful to preschool staff in charting longitudinal development in each child, and also to kindergarten teachers in supplying entry level ability information. It will be possible to tell approximately what skills the child has attained; and if he has been in the center for several rating periods, how fast he is able to progress, or his rate of learning.

Table 5 shows the different SREB subtests, the number of items to be passed to be at the norm for each age group, the percentage of the total items that the number of normative items at each age includes and the actual initial and second rating score percentages. The data cannot be considered to be pretest-posttest, and are not matched scores because many children who were rated in March left before the June rating. Some children evaluated in June were new to the program, making this their initial rating. For this reason, scores are reported as entry level (initial) and second (three months) ratings and are compiled by the age the children were for each particular rating. Next year's program should include, then, zero, six-, twelve- and eighteen-month ratings for children who have attended those respective number of months. At Gordon, the ratings were spaced only three months apart in 1972-73 as the lead teacher was most anxious to keep track of early program results.

TABLE 5

MEAN PERCENTAGE RATINGS FOR SOUTHERN REGIONAL EDUCATION BOARD CHECKLIST SCORES

	Normative Number Of Items	Norm Per Cent	Total Skills Mastered Initital Rating	Second Rating*
Two-Year Olds			N=4	N=2
Cognitive	10	25	27	77
Social-Emotional	3	14	54	[illegible]8
Motor Skills	7	32	56	8[illegible]
Hygiene and Self-Help	5	25	55	90
Three-Year Olds			N=11	N=9
Cognitive	18	48	32	79
Social-Emotional	7	32	55	97
Motor Skills	15	68	56	99
Hygiene and Self-Help	11	55	66	90
Four-Year Olds			N=12	N=10
Cognitive	38	100	72	80
Social Emotional	22	100	86	100
Motor Skills	24	100	82	98
Hygiene and Self-Help	20	100	80	86
Five-Year Olds			N=10	N=16
Cognitive	38	100	74	91
Social Emotional	22	100	91	100
Motor Skills	24	100	89	99
Hygiene and Self-Help	20	100	81	93

* A three-month interval, March to June.

As can be seen in Table 5, early results were very good. The two-year-olds, while very few in number, did exceed age norms on both ratings, and made considerable gain. The three-year-olds were above norms on social-emotional and hygiene subscales on the initial rating, and above norms on all subscales on the second rating. The four- and five-year-olds scored at their norms only on the social-emotional scale of the second rating. However, to achieve their norms, the four- and five-year-olds had to pass every item on the checklist. In contrast, the three-year-olds only had to achieve 48 per cent of the total items to be at the cognitive norm, 32 per cent to reach the social-emotional norm, etc. For this reason, it is suggested that the upper limits of the SREB instrument be extended, or that an additional instrument be used to fairly evaluate the older preschoolers. As can be seen by looking down each column separately, the scores increased on each subtest by age level. For example, on the initial cognitive subtest the two-year-olds achieved 27 per cent, the three-year-olds achieved 32 per cent, the four-year-olds reached 72 per cent, and the five-year-olds achieved 74 per cent. Increases can also be seen in performance by each age group, on each sub area, and between the initial and second rating. The four- and five-year-old initial scores were quite high, and, therefore, the amount of gain possible was not as great as for the younger groups.

Even within the boundaries imposed by a limited-range evaluation instrument, the results do clearly show that the children benefited from the program.

A copy of the SREB checklist is in Appendix B.

F. Career Education

The Comprehensive Career Education Model (CCEM) units were officially used in kindergarten, first, second, third, fourth, and seventh grades and unofficially used in preschool, fifth and sixth grades. How the units were used was covered in Section VI, Process and Management, of this report.

Student information forms, unit pretest and posttest, lesson-embedded item summary forms, and unit questionnaires were used as evaluative and diagnostic measures by some teachers, but results were not available at the time this report was being written. If further information is desired, there will be a final project report on CCEM which should

be available by the winter of 1974. Subjective evaluation of the program at Gordon, made by teachers and pupils, was highly positive, and the school intends to use the unit materials as a part of the 1973-74 curriculum.

G. Attitudes Toward Education and Individualization

The assumption being made that teachers' attitudes toward education play an important part in creating school climate, and that a child-centered rather than subject-centered climate is necessary in moving towards individualization, the Opinionnaire on Attitudes Toward Education, developed by H. C. Lindgren, and G. M. Patton (1958), was administered to all faculty at Gordon. The instrument is a 50-item scale constructed to measure attitudes toward child-centered policies and practices in education. The question-statements are concerned with the desirability of understanding the behavior of students, the desirability of the teacher using authoritarian methods as a means of controlling student behavior, and the desirability of subject-matter-centeredness as compared with learner-child-centeredness.

The attitude score is the number of positive items agreed with, plus the number of negative items disagreed with, where positive items are favorable toward child-centered practices. The range of scores is from zero to 50, with the higher end of the scale indicating the most favorable attitudes toward child-centered policies and practices in education.

Table 6 gives the mean score obtained at Gordon. There were no aides, so the score is representative of the 24 regular faculty members. They were slightly below the mean for all 34 schools included in the survey but certainly high enough to indicate generally favorable attitudes toward child-centered policies.

An intercorrelation maxtrix, including each of the 34 schools' total school attitude score, predicted achievement quotient, and national achievement quotient, was computed. No significant correlation was found between attitude toward education and either PAQ or NAQ.

TABLE 6

MEAN SCORE ON OPINIONNAIRE ON ATTITUDES TOWARD EDUCATION

	N	Mean Score
All Teachers at Gordon	24	35.5
All Schools	34	36.2

VIII. COST ANALYSIS

The data presented in Table 7 show the relative cost for a one-grade unit of reading gain, based upon the achievement quotient (or per cent of actual score to predicted score) for FY 1973 and the amount of funds spent. Data for these computations came from the General Funds Report, June 1973, and the Trust and Agency Report, June, 1973. From the expenditure figures, estimates were made of the per-pupil cost from general funds and from special programs or compensatory funds. These data are not exact or refined, but rather are broad estimates based upon information obtained not only from the above mentioned reports, but also from the school staff relative to utilization of resources.

No grade-unit cost was calculated for the preschool, kindergarten, or first grade because no prior data exist before second grade on which to base a predictive achievement quotient. However, the total per-pupil expenditures show that preschool costs are much higher than the cost for kindergarten through seventh grade costs. This is to be expected as the pupil-teacher ratio must be very small to properly care for young children. The equipment and supplies needs are also more extensive in a preschool setting. Total per-pupil expenditure in all other grades are approximately the same, ranging from $608.83 in the fifth and sixth grades to $614.75 in the first, second, and third grades. As the extended day program never really got going, no costs were computed in the upper grades for that service. The variance in by-grade expenditures stems from the Comprehensive Career Education Model program in kindergarten, first, second, third, fourth, and seventh grades, and the Comprehensive Instruction Program in the first, second, and third grades.

TABLE 7

COST ANALYSIS
1972-73
TOTAL AVERAGE DAILY ATTENDANCE (Prek-7 = 582)

	Grades									
	Prekdg	Kdg	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Average
Average Daily Attendance	40	35	71	70	80	72	85	53	66	85
Per Pupil Cost										
A. General Funds										
1. Regular										
a. Salary	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19
b. Nonsalary	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50
c. Total	$ 607.69	$ 607.69	$ 607.69	$ 607.69	$ 607.69	$ 607.69	$ 607.69	$ 607.69	$ 607.69	$ 607.69
2. CIP										
a. Salary	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-
b. Nonsalary	-0-	-0-	4.13	4.13	4.13	-0-	-0-	-0-	-0-	1.57
c. Total	$ -0-	$ -0-	$ 4.13	$ 4.13	$ 4.13	$ -0-	$ -0-	$ -0-	$ -0-	$ 1.57
3. Total General										
a. Salary	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19	$ 569.19
b. Nonsalary	38.50	38.50	42.63	42.63	42.63	38.50	38.50	38.50	38.50	40.07
c. Total	$ 607.69	$ 607.69	$ 611.82	$ 611.82	$ 611.82	$ 607.69	$ 607.69	$ 607.69	$ 607.69	$ 609.26
B. Compensatory Funds										
1. CCEM										
a. Salary	$ 0-	$ 5.79	$ 5.79	$ 5.79	$ 5.79	$ 5.79	$ -0-	$ -0-	$ 5.79	$ 4.02
b. Nonsalary	-0-	-0-	0	0	0	-0-	-0-	-0-	-0-	0
c. Total	$ -0-	$ 5.79	$ 5.79	$ 5.79	$ 5.79	$ 5.79	$ -0-	$ -0-	$ 5.79	$ 4.02
2. Atlanta DeKalb Title IV-A										
a. Salary	$ 370.89	$ 0-	$ -0-	$ -0-	$ -0-	$ 0-	$ 0-	$ 0-	$ 0-	$ 25.49
b. Nonsalary	28.63	-0-	-0-	-0-	-0-	0	-0-	-0-	-0-	1.97
c. Total	$ 399.52	$ -0-	$ -0-	$ 0-	$ -0-	$ 0-	$ -0-	$ 0-	$ 0-	$ 27.46
3. Child Day Care Title IV-A										
a. Salary	$ 595.29	$ -0-	$ -0-	$ 0-	$ -0-	$ -0-	$ -0-	$ 0-	$ -0-	$ 40.92
b. Nonsalary	55.47	-0-	-0-	0	-0-	0	0	0	-0-	3.82
c. Total	$ 650.76	$ -0-	$ -0-	$ 0-	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ 44.74
4. Title II										
a. Salary	$ -0-	$ -0-	$ -0-	$ -0-	$ -0-	$ 0	$ 0-	$ -0-	$ 0-	$ 0-
b. Nonsalary	-0-	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
c. Total	$ -0-	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14
5. Total Compensatory Funds										
a. Salary	$ 966.18	$ 5.79	$ 5.79	$ 5.79	$ 5.79	$ 5.79	$ -0-	$ -0-	$ 5.79	$ 70.43
b. Nonsalary	84.10	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	6.93
c. Total	$1,050.28	$ 6.93	$ 6.93	$ 6.93	$ 6.93	$ 6.93	$ 1.14	$ 1.14	$ 6.93	$ 77.36
6. Total Funds										
a. Salary	$1,535.37	$ 574.98	$ 574.98	$ 574.98	$ 574.98	$ 574.98	$ 569.19	$ 569.19	$ 574.98	$ 639.62
b. Nonsalary	122.60	39.64	43.77	43.77	43.77	39.64	39.64	39.64	39.64	47.00
c. Total	$1,657.97	$ 614.62	$ 618.75	$ 618.75	$ 618.75	$ 614.62	$ 608.83	$ 608.83	$ 614.62	$ 686.62
Predicted Achievement Quotient	---	---	---	89	99	101	102	95	98	97
Cost Per Unit of Predicted Achievement Quotient										
A. General Funds	$ ---	$ ---	$ ---	$ 6.88	$ 6.18	$ 6.02	$ 5.96	$ 6.40	$ 6.33	$ 6.29
B. Compensatory Funds	---	---	---	.08	.07	.07	.01	.01	.07	.80
C. Total	$ ---	$ ---	$ ---	$ 6.96	$ 6.25	$ 6.09	$ 5.97	$ 6.41	$ 6.40	$ 7.09

By looking at the PAQ, or predicted achievement quotient, it can be seen that those grades with the higher PAQ, the fourth and fifth, did not have the highest expenditures. In fact, the fifth grade had the lowest cost per unit of predicted quotient, $5.97, because of its high PAQ (102), and no CIP or CCEM fundings. In contrast, the second grade PAQ was 89, and these pupils received both CIP and CCEM. Their cost per unit of predicted quotient was $6.96.

These results indicate that neither CIP nor CCEM influenced predicted pupil achievement. The influence of Title IV-A funds will be analyzed in 1973-74 through comparison of Basecheck scores of kindergarten pupils who attended preschool and those who did not, to see if significant differences exist in the fall and in the spring testing. While such scores as SREB and Basecheck are not assigned a predicted achievement quotient, they can be pursued as planned above to justify expenditure of Title IV-A compensatory funds.

IX. CONCLUSIONS

Based on the school instructional program and the pupil performance, the following conclusions are made:

A. At entry level, kindergarten pupils were best prepared in language, and performed least well in visual perception.

B. None of the grades performed as had been projected in the school objectives.

C. The third and fourth grades reached the Predicted Achievement Quotient (PAQ) in reading, and the fourth and fifth grades reached the Predicted Achievement Quotient on composite test data. None of the grades reached the National Achievement Quotient (NAQ).

D. Gains above norms were achieved across age and time for the two- and three-year-old preschool pupils. Four- and five-year-old gains were made across age and time, but were not above age norms.

E. Comprehensive Career Education Model units were used effectively throughout the school.

F. Teachers showed positive attitudes toward child-centered policies and practices such as individualization of instructional programs. These attitudes did not, however, correlate with achievement.

G. There is no evidence that the Comprehensive Instructional Program (CIP) had any influence on achievement.

X. RECOMMENDATIONS

A. That emphasis be placed on follow-through of pupils' information (SREB data) from preschool to kindergarten, facilitating planning for individualization in kindergarten.

B. That identification numbers be assigned preschool (Title IV-A) children so that longitudinal evaluation of programs, diagnosing of pupil development, and program planning may be facilitated.

C. That a working parent and community advisory committee be formed to aid the Title IV-A effort, and provide an example of viable community involvement.

D. That the projected emphasis on individualization and ungraded curriculum be carried through to all grades.

F. That continued use be made of Comprehensive Career Education Models (CCEM) units, and that teachers use the unstructured parameters next year to integrate the units into their existing program in the manner which they feel best suited to the particular situation.

G. That a research design which would not be adversely affected by changes in compensatory programs be used in 1973-74 to measure affective development.

H. That the upper limits of the Southern Regional Education Board (SREB) checklist be extended to allow greater discrimination in evaluation of four- and five-year-olds, and to cover abilities being learned but not evaluated.

The faculty and staff of Gordon deserve recognition for their concern and dedication to giving the best possible education to the pupils of the school. Consideration and implementation of promising, innovative ideas is standard procedure at this school and determination to improve pupil performance should be reflected in future achievement.

APPENDIX A

1968-69 METROPOLITAN ACHIEVEMENT TESTS
MOBILITY INDEX .58

	Total Mean	City Wide Mean	Difference
Grade 6			
Pretest			
Word Knowledge	3.8		
Reading	3.7		
Language	4.0		
Language Study Skills	3.9		
Arithmetic Computation	3.7		
Arithmetic Problem Solving Concepts	3.7		
Social Studies and Information	3.5		
Social Studies Study Skills	4.1		
Science	3.9		
Posttest			
Word Knowledge	-		
Reading	-		
Language	-		
Language Study Skills	-		
Arithmetic Computation	-		
Arithmetic Problem Solving Concepts	-		
Social Studies and Information	-		
Social Studies Study Skills	-		
Science	-		
Grade 7			
Prestest			
Word Knowledge	-		
Reading	-		
Language	-		
Language Study Skills	-		
Arithmetic Computation	-		
Arithmetic Problem Solving Concepts	-		

	Total Mean	City Wide Mean	Difference
Social Studies and Information	-		
Social Studies Study Skills	-		
Science	-		
Posttest			
Word Knowledge	4.7	4.0	+0.7
Reading	4.4	3.8	+0.6
Language	3.9	3.6	+0.3
Language Study Skills	4.9	4.4	+0.5
Arithmetic Computation	4.7	3.7	+1.0
Arithmetic Problem Solving Concepts	4.5	4.0	+0.5
Social Studies Study Skills	4.3	3.8	+0.5
Science	4.4	3.6	+0.8
Mean Difference			+0.6

1969-70 METROPOLITAN ACHIEVEMENT TESTS
MOBILITY INDEX .41

	Total Mean	City Wide Mean	Difference
Grade 4			
Pretest			
Word Knowledge	3.8	3.2	+0.6
Reading	3.7	3.2	+0.5
Language	3.8	3.3	+0.5
Arithmetic Conputation	3.0	2.8	+0.2
Arithmetic Problem Solving Concepts	3.2	3.0	+0.2
Word Discrimination	4.2	3.4	+0.8
Spelling	4.6	3.5	+1.1
Posttest			
Word Knowledge	4.1	3.4	+0.7
Reading	3.8	3.4	+0.4
Language	4.1	3.6	+0.5
Arithmetic Computation	4.3	3.8	+0.5
Arithmetic Problem Solving Concepts	3.2	3.2	-
Word Discrimination	4.2	3.5	+0.7
Spelling	4.8	4.1	+0.7
Mean Difference			+0.6
Grade 5			
Pretest			
Word Knowledge	3.8	3.1	+0.7
Reading	3.8	3.3	+0.5
Language	3.9	3.5	+0.4
Language Study Skills	3.8	3.4	+0.4
Arithmetic Computation	4.1	3.6	+0.5
Arithmetic Problem Solving Concepts	3.8	3.6	+0.2
Social Studies Information	3.1	2.9	+0.2
Social Studies Study Skills	3.3	2.9	+0.4
Science	3.4	3.2	+0.2

	Total Mean	City Wide Mean	Difference
Posttest			
Word Knowledge	4.1	3.6	+0.5
Reading	3.9	3.6	+0.3
Language	4.3	4.0	+0.3
Language Study Skills	4.3	3.7	+0.6
Arithmetic Computation	4.2	3.8	+0.4
Arithmetic Problem Solving Concepts	3.7	3.5	+0.2
Social Studies Information	3.9	3.5	+0.4
Social Studies Study Skills	3.5	3.3	+0.2
Science	3.8	3.6	+0.2
Mean Difference			+0.4
Grade 6			
Pretest			
Word Knowledge	3.1	3.2	-0.1
Reading	3.0	3.2	+0.2
Language	3.1	3.2	-0.1
Language Study Skills	3.3	3.4	-0.1
Arithmetic Computation	3.2	3.1	+0.1
Arithmetic Problem Solving Concepts	3.4	3.3	+0.1
Social Studies Information	3.2	3.1	+0.1
Social Studies Study Skills	3.2	3.5	-0.3
Science	3.2	3.2	-
Posttest			
Word Knowledge	3.5	3.7	-0.2
Reading	3.4	3.5	-0.1
Language	3.7	3.8	-0.1
Language Study Skills	3.7	3.7	- -
Arithmetic Computation	4.1	3.3	+0.8
Arithmetic Problem Solving Concepts	3.9	3.4	+0.8
Social Studies Information	3.0	3.1	+0.5
Social Studies Study Skills	3.2	3.3	-0.1
Science	3.5	3.5	-
Mean Difference			+.100

	Total Mean	City Wide Mean	Difference
	Grade 7		
Pretest			
Word Knowledge	3.9	3.6	+0.3
Reading	3.5	3.5	-
Language	4.0	3.2	+0.8
Language Study Skills	4.0	3.9	+0.1
Arithmetic Computation	3.4	3.2	+0.2
Arithmetic Problem Solving Concepts	3.7	3.6	+0.1
Social Studies Information	3.8	3.5	+0.3
Social Studies Study Skills	3.4	3.4	-
Science	3.4	3.2	+0.2
Posttest			
Word Knowledge	3.9	3.8	+0.1
Reading	3.7	3.6	+0.1
Language	4.0	3.8	+0.2
Language Study Skills	3.8	4.0	-0.2
Arithmetic Computation	3.8	3.7	+0.1
Arithmetic Problem Solving Concepts	3.5	3.6	-0.1
Social Studies Information	3.7	3.6	+0.1
Social Studies Study Skills	3.4	3.6	-0.2
Science	3.6	3.7	-0.1
Mean Difference			+0.125

1970-71 METROPOLITAN ACHIEVEMENT TESTS
MOBILITY INDEX .52

	Total Mean	City Wide Mean	Difference
Grade 1			
Pretest			
Word Knowledge	-		
Word Analysis	-		
Reading	-		
Total Reading	-		
Total Mathematics	-		
Posttest			
Word Knowledge	1.7		
Word Analysis	1.7		
Reading	1.4		
Total Reading	1.6		
Total Mathematics	1.5		
Grade 2			
Pretest			
Word Knowledge	1.8		
Word Analysis	1.8		
Reading	1.6		
Total Reading	1.8		
Total Mathematics	1.5		
Posttest			
Word Knowledge	2.2		
Word Analysis	2.2		
Reading	2.0		
Total Reading	2.2		
Total Mathematics	2.1		
Grade 3			
Pretest			
Word Knowledge	2.6		
Word Analysis	2.6		

	Total Mean	City Wide Mean	Difference
Reading	2.5		
Total Reading	2.3		
Total Mathematics	2.6		
Spelling	2.8		
Posttest			
Word Knowledge	2.8		
Word Analysis	2.8		
Reading	2.7		
Total Reading	2.9		
Total Mathematics	3.1		
Grade 4			
Pretest			
Word Knowledge	3.8	3.4	+0.4
Reading	3.2	3.5	-0.3
Language	3.6	3.5	+0.1
Arithmetic Computation	3.5	3.0	+0.5
Arithmetic Problem Solving Concepts	3.8	3.2	+0.6
Word Discrimination	3.8	3.7	+0.1
Spelling	4.3	4.1	+0.2
Posttest			
Word Knowledge	3.5	3.4	+0.1
Reading	3.3	3.4	-0.1
Language	3.4	3.6	-0.2
Arithmetic Computation	4.1	3.6	+0.5
Arithmetic Problem Solving Concepts	3.3	3.1	+0.2
Word Discrimination	3.5	3.5	-
Spelling	4.7	4.5	+0.2
Mean Difference			+0.177
Grade 5			
Pretest			
Word Knowledge	3.5	3.6	-0.1
Reading	3.4	3.6	-0.2
Language	4.0	4.2	-0.2

	Total Mean	City Wide Mean	Difference
Language Study Skills	3.9	3.9	-
Arithmetic Computation	4.8	4.6	+0.2
Arithmetic Problem Solving Concepts	4.2	4.2	-
Social Studies Information	3.5	3.5	-0.6
Social Studies Study Skills	3.1	3.7	-0.1
Science	3.8	3.9	-0.1
Posttest			
Word Knowledge	3.9	4.1	-0.2
Reading	3.9	3.9	-
Languge	4.9	4.8	+0.1
Languge Study Skills	4.2	4.2	-
Arithmetic Computation	4.9	4.9	-
Arithmetic Problem Solving Concepts	4.5	4.3	+0.2
Social Studies Information	3.8	4.0	-0.2
Social Studies Study Skills	4.3	4.0	+0.3
Science	4.5	4.0	+0.5
Mean Difference			-0.31
Grade 6			
Pretest			
Word Knowledge	3.5	3.3	+0.2
Reading	3.6	3.3	+0.3
Language	2.9	3.5	-0.6
Language Study Skills	3.6	3.7	-0.1
Arithmetic Computation	3.4	3.1	+0.3
Arithmeitc Problem Solving Concepts	3.9	3.3	+0.6
Social Studies Information	3.5	3.1	+0.4
Social Studies Study Skills	3.7	3.6	+0.1
Science	3.5	3.3	+0.2
Posttest			
Word Knowledge	3.6	3.5	+0.1
Reading	3.4	3.4	-
Language	3.7	3.9	-0.2

	Total Mean	City Wide Mean	Difference
Language Study Skills	3.5	3.7	-0.2
Arithmetic Computation	3.7	3.1	+0.6
Arithmeitc Problem Solving Concept	3.5	3.2	+0.3
Social Studies Information	3.3	3.0	+0.3
Social Studies Study Skills	3.5	3.4	+0.1
Science	3.4	3.3	+0.1
Mean Difference			+0.147
	Grade 7		
Pretest			
Word Knowledge	3.5	3.7	-0.2
Reading	2.9	3.5	-0.6
Language	2.7	3.3	-0.6
Language Study Skills	3.9	4.2	-0.3
Arithmetic Computation	3.4	3.3	+0.1
Arithmetic Problem Solving Concepts	3.5	3.6	-0.1
Social Studies Information	3.1	3.7	-0.6
Social Studies Study Skills	2.4	3.5	-1.1
Science	3.1	3.4	-0.3
Posttest			
Word Knowledge	3.3	3.7	-0.4
Reading	3.0	3.5	-0.5
Language	3.1	3.9	-0.8
Arithmetic Computation	3.3	3.4	-0.1
Arithmetic Problem Solving Concepts	3.5	3.5	-
Social Studies Information	3.1	3.4	-0.3
Social Studies Study Skills	3.3	3.5	-0.2
Science	3.5	3.6	-0.1
Mean Difference			-0.381

1971-72 METROPOLITAN ACHIEVEMENT TESTS
MOBILITY INDEX .59

	Total Mean
Grade 2	
Pretest	
Word Knowledge	1.8
Word Analysis	1.7
Reading	1.6
Reading Total	1.7
Total Mathematics	1.6
Posttest	
Word Knowledge	2.1
Word Analysis	2.0
Reading	2.1
Reading Total	2.2
Total Mathematics	1.9
Grade 3	
Pretest	
Word Knowledge	2.3
Word Analysis	2.3
Reading	2.0
Spelling	2.6
Mathematics Computation	2.1
Mathematics Concepts	2.5
Mathematics Problems	2.4
Total Mathematics	2.2
Total Reading	2.1
Posttest	
Word Knowledge	2.9
Word Analysis	2.8
Reading	3.4
Spelling	3.3
Mathematics Computation	2.9
Mathematics Concepts	3.2
Mathematics Problems	2.9
Total Mathematics	2.9
Total Reading	3.0

	Total Mean
Grade 4	
Posttest	
Word Knowledge	-
Reading	-
Language Total	-
Arithmetic Computation	-
Arithmetic Problem Solving Concepts	-
Word Discrimination	-
Spelling	-
Grade 5	
Pretest	
Word Knowledge	4.2
Reading	4.1
Language	4.5
Language Study Skills	4.9
Arithmetic Computation	4.7
Arithmetic Problem Solving Concepts	4.5
Social Science Information	4.1
Social Studies Study Skills	4.2
Science	4.4
Posttest	
Word Knowledge	4.5
Reading	4.4
Language	5.1
Language Study Skills	4.7
Arithmetic Compuation	5.0
Arithmetic Probelm Solving Concepts	4.5
Social Science Information	4.4
Social Studies Study Skills	4.2
Science	4.4
Grade 6	
Pretest	
Word Knowledge	4.6
Reading	4.6

	Total Mean
Language	5.2
Language Study Skills	5.0
Arithmetic Computation	5.1
Arithmetic Problem Solving Concepts	4.6
Social Science Information	4.4
Social Studies Study Skills	4.9
Science	4.9
Posttest	
Word Knowledge	4.9
Reading	4.7
Language	5.4
Language Study Skills	5.0
Arithmetic Computation	5.1
Arithmeitc Problem Solving Concepts	4.9
Social Science Information	4.4
Social Studies Study Skills	5.0
Science	5.0
Grade 7	
Pretest	
Word Knowledge	5.6
Reading	5.1
Language	5.3
Language Study Skills	5.0
Arithmetic Computation	5.8
Arithmetic Problem Solving Concepts	5.8
Social Science Information	5.4
Social Studies Study Skills	4.9
Science	5.6
Posttest	
Word Knowledge	5.4
Reading	4.9
Language	5.9
Language Study Skills	5.7
Arithmetic Computation	6.0
Arithmezic Problem Solving Concepts	6.2
Social Science Information	5.6
Social Studies Study Skills	4.9
Science	5.7

1972-73 IOWA TESTS OF BASIC SKILLS
MOBILITY INDEX .36

	Mean
Grade 1	
Vocabulary	1.2
Word Analysis	1.3
Reading Comprehension	1.5
Spelling	1.5
Math Concepts	1.2
Math Problems	1.2
Math Total	1.2
Test Total	1.3
Grade 2	
Vocabulary	2.0
Word Analysis	1.8
Reading Comprehension	1.9
Spelling	2.0
Math Concepts	1.8
Math Problems	1.8
Math Total	1.8
Test Total	1.9
Grade 3	
Vocabulary	2.6
Reading	2.7
Spelling	3.0
Capitalization	3.0
Punctuation	3.0
Language	2.5
Map Skills	2.4
Graphs and Tables	2.4
Reference Materials	2.5
Math Concepts	2.5
Math Problems	2.6
Language Total	2.9
Word Study Skills Total	2.5
Math Total	2.6
Composite	2.7

	Mean
Grade 4	
Vocabulary	3.2
Reading	3.6
Spelling	3.8
Capitalization	3.8
Punctuation	3.9
Language Usage	3.3
Map Skills	3.3
Graphs and Tables	3.3
Reference Materials	3.7
Math Concepts	3.3
Math Problems	3.5
Language Total	3.7
Work Skills Total	3.4
Math Total	3.4
Composite	3.6
Grade 5	
Vocabulary	4.0
Reading	3.9
Spelling	4.7
Capitalization	4.1
Punctuation	4.5
Language Usage	3.9
Map Skills	4.6
Graphs and Tables	4.6
Reference Materials	4.6
Math Concepts	4.1
Math Problems	4.2
Language Total	4.4
Work Skills Total	4.6
Math Total	4.1
Composite	4.3
Grade 6	
Vocabulary	4.7
Reading	4.7
Spelling	4.8
Captilzation	4.9
Punctuation	4.7
Languge Usage	4.3

	Mean
Map Skills	4.7
Graphs and Tables	5.0
Reference Materials	5.0
Math Concepts	4.9
Math Problems	4.7
Language Total	4.6
Work Skills Total	4.8
Math Total	4.8
Composite	4.7
Grade 7	
Vocabulary	5.0
Reading	5.0
Spelling	5.2
Capitalization	5.4
Punctuation	5.0
Language Usage	5.6
Map Skills	5.4
Graphs and Tables	5.2
Reference Material	5.6
Math Concepts	5.2
Math Problems	5.4
Language Total	5.4
Work Skills Total	5.4
Math Total	5.3
Composite	5.3

APPENDIX B

S. R. E. B.*

RATING BOOKLET

B-1

* Southern Regional Educational Board

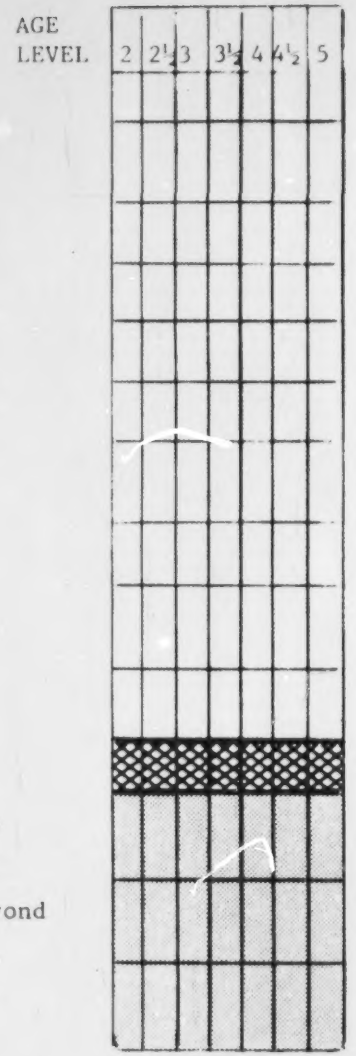
Forms 16B-D Revised September, 1972

CHILD'S NAME _____ DATE OF BIRTH _____ SEX M____ F_____

ENROLLMENT DATE _____ SCHOOL NAME _____

	RATING DATE	RATER
1.		
2.		
3.		
4.		
5.		
6.		
7.		

I. COGNITIVE SECTION



Two Year Olds

101.	Uses words	Uses words to express wants
102.	Talks	Names some 10-15 known objects and a few familiar people or pets, has a small noun-verb vocabulary
103.	Pronouns	Uses pronouns "me" and "my," shows possessive spirit
104.	Names 3 pictures	Names 3 pictures in picture book
105.	Points to body	Points to parts of a doll or body (hair, mouth, eyes, etc.)
106.	Makes sentences	Makes 2-3 word sentences
107.	Follows Commands	Complies with simple commands--such as retrieving, or "no-no." Fetches, carries or goes
108.	Listens	Listens to short nursery rhymes
109.	Matches	Matches, compares familiar objects as to color, or form, or size in play, or groups similar objects
110.	Counts 2	Counts 2, aware of "one more," knows "how many" to 2

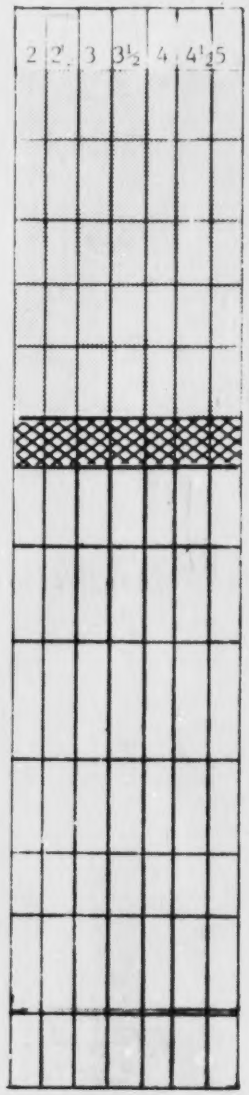
Three Year Olds

111.	Compares size	Extends "matching" concepts to size, as big or little. Comparisons may be easy, but should be verbalized and of practical use, as in block building.
112.	Counts 3	Extends concept of counting to three. Understands process of counting beyond two. May rote count beyond this.
113.	Dramatizes	Acts out, singly, or with others, simple stories, Mother Goose rhymes and characters and scenes. Acts out role playing.

KEY: Two year old level Three year old level Four year old level

Three Year Olds (Continued)

AGE LEVEL 2 2½ 3 3½ 4 4½ 5



114. Uses Plurals

115. Converses — In short sentences, answers questions, gives information, repeats, uses language to convey simple ideas.

116. Sings — Sings short snatches of songs

117. Knows name — Gives first and last name

118. Names pictures and tells action — Names pictures, and on request tells the action, e.g., "Baby is sleeping," or can identify the usage of things in pictures, "Show me the one you wear."

Four Year Olds

119. Knows parts of body — Can identify by pointing to or matching all major visible parts of body.

120. Counts to 4 — Counts four objects and knows what he is doing--does not do it by rote memory.

121. Draws square — Can draw a square design (angle corners and about equal sides) with crayon, pencil, or pen on paper or suitable surface. Design may be drawn with or without copy or as part of other drawing.

122. Uses connected sentences — Tells experiences or simple events in sequence (beginning middle, end). Uses sentence combinations.

123. Draws I — Draw human figures with head, body, arms and legs.

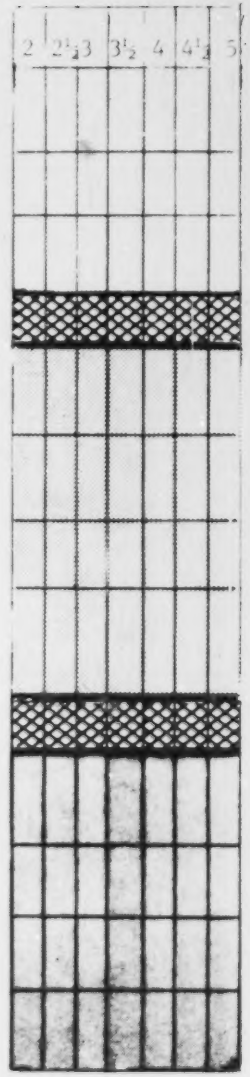
124. Names coins — Names correctly three of four--penny, nickel, dime, or quarter and does not confuse them. He need not know their numerical value nor their relative worth.

125. Recites — Reproduces short verses, rhymes, little songs from memory--or makes them up.

Four Year Olds (Continued)

			AGE LEVEL 2	2½	3	3½	4	4½	5
126.	Speaks clearly	Speaks clearly enough so that a stranger can understand him.							
127.	Knows age	Tells age to last or nearest birthday in whole years. May know age to years and months or to next age. Must be more than rote memory--that is his age should have meaning to him as being larger or smaller than some other number.							
128.	Names colors	Tells and selects names of primary colors (red, green, yellow, blue) when pointing out an object. Simple selecting, matching or identifying are done at earlier age.							
129.	Draw triangle	Same as drawing square except for difference in design.							
130.	Knows address	Can give address (street and number) correctly.							
131.	Knows simple relative concepts	(Avoid abstract examples.) Understands concept of weight (heavy and light).							
132.	"	Understands concept of temperature (hot and cold). For example, which is hot, stove or refrigerator?							
133.	"	Understands concept of size (large and small). Use objects obviously different in size.							
134.	"	Understands concept of distance (far and near). Use objects child can move.							
135.	Uses prepositions correctly	Knows the meaning of prepositions such as up and down, and in and out, over and under.							
136.	Prints	Prints first name when requested or for self-satisfaction.							
137.	Knows seasons	Knows seasons of the year and how they relate to events (school starts in the fall; Christmas comes in winter).							
138.	Draw 2	Draws human figures with head, body, arms and legs, indications of hands and feet, and symbols for eyes, and mouth.							

II. SOCIAL AND EMOTIONAL SECTION



Two Year Olds

139. Shows affection — Shows affection--carries or hugs doll, shows regard for people or possessions, fondles and indicates personal relatedness

140. Occupies self — Initiates own play activities or on simple suggestion.

141. Explores — Explores, investigates surroundings, adventures in new or modified ways.

Three Year Olds

142. Plays beside — Plays singly with sustained interest alongside or among other children or with adults, pets, or belongings with little disturbance or disturbing.

143. Plays with — Interacts with another child or children. Interpersonal play with other children, pets or adults

144. Helps — Helps at little household tasks or errands.

145. Knows and relates to own sex — Can respond correctly to "Are you a little boy or a little girl?" Relates and acts accordingly

Four Year Olds

146. Tells name self esteem — Identifies self by given first and last name, gives both names when asked.

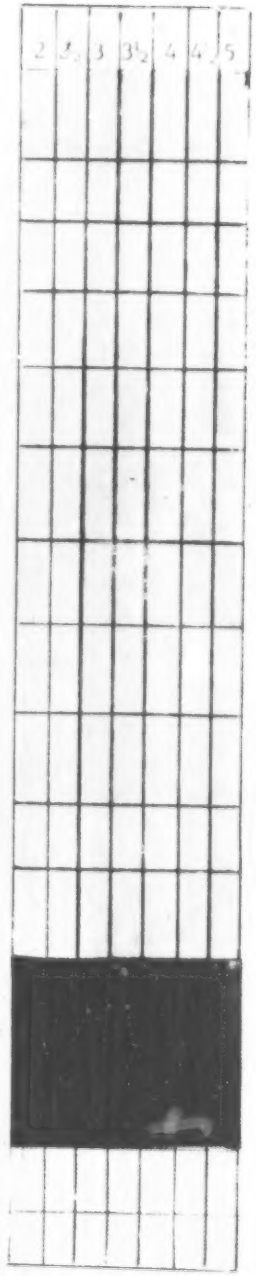
147. Can separate — Able to separate from mother without crying

148. Relates positively to adults — Relates positively--asks for help, asks approval, but is not overly dependent

149. Relates positively to children — Seeks a child to play with, or responds to overtures from another child.

Four Year Olds (Continued)

AGE LEVEL



150.	Plays cooperatively	Plays in groups (two, three, or more children) observes rules in a game or in competition.
151.	Shares	Shares toys and materials with other children.
152.	Takes turns	Asks for a turn, awaits his turn without too much impatience.
153.	Identifies others	Knows the name of and calls by name two adults on staff or other children.
154.	Helps	Helps or offers to do something, such as to help set places at lunch or help clean up.
155.	Participates	Joins in song or group games with others--children's songs, action songs, memorizes words and melodies, shares in events when singing is desired.
156.	Pride	Shows pride in accomplishment or products he creates such as painting, block building, sand castle.
157.	Persistence	Persists on problem solving games such as matching games, puzzles, and/or can sit at a chosen task until completed or at least 15 minutes.
158.	Protects self	Stands up for own rights, does not permit other children to constantly take advantage of him.
159.	Amuses self	Makes purposeful use of equipment or activity during free play time.
160.	Pays attention	Can sit through a complete story selected for the age group. Listens to a story that the teacher is reading and looks at pictures to follow the story.

III. MOTOR SKILLS SECTION

Two Year Olds

161.	Walks backward	
162.	Walks up steps	Walks up steps with help--not on all fours

Two Year Olds (Continued)

			AGE LEVEL 2	2½	3	3½	4	4½	5
163.	Climbs	Climbs - furniture and obstacles							
164.	Kicks ball	Kicks ball foward							
165.	Throws ball	Throws ball overhand (not directed in aim)							
166.	Runs								
167.	Stacks	Stacks blocks 3 high							
168.	Unwraps	Unwraps, removes covers from candy or other objects or peels bananas (no special skills required)							
169.	Disassembles	Disassembles - takes simple objects apart with minimal difficulty, unfastens clothing.							

Three Year Olds

170.	Assembles	Takes simple objects available, puts simple parts together not requiring much mechanical skill.							
171.	Builds	Uses simple building blocks, color blocks, construction toys. Shows imagination.							
172.	Copies circle	Draws a circle, usually from copy.							
173.	Builds tower	Stacks blocks eight high in imitation of one you do.							
174.	Jumps in place								
175.	Walks down stairs	One step per tread							
176.	Balances	On one foot for one second.							
177.	Throws ball purposely overhand	Distance, direction and accuracy not essential, but should be more than grossly random.							

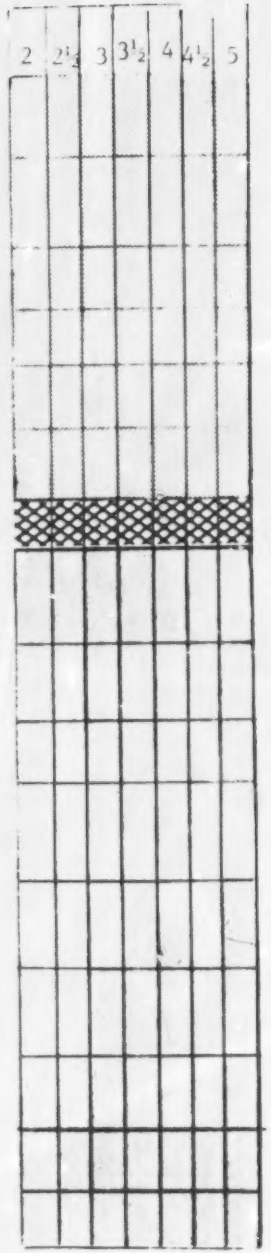
Four Year Olds

178.	Climbs	Is able to climb equipment provided for that purpose.
179.	Catches	Catches 12-inch or beach ball when it is thrown to him.
180.	Hops	On one foot alone--four steps.
181.	Skips	Hops on one foot, then the other in continuous movement from place to place.
182.	Strings or threads	Can thread beads or spools on string.
183.	Uses scissors	Understands use of scissors and can cut a piece of paper.
184.	Hammers	Can hammer nails into a board until they are secure.

IV. HYGIENE AND SELF-HELP SECTION

Two Year Olds

185.	Drinks from cup	Drinks from cup or glass unassisted but spills occasionally.
186.	Undresses	Removes simple garment
187.	Uses spoon	Uses spoon, spills a lot
188.	Begins toilet training	Begins toilet training, asks for toilet.
189.	Shows pride	Shows pride in toilet achievement and concern about failures.



Three Year Olds

190.	Is toilet trained	Exercises bladder and bowel control
191.	Uses toilet alone	Cares for self at toilet (goes to toilet alone without help, knows papering). Pulls up and pulls down own clothes but may require help.
192.	Dresses	Puts on coat or dress with help on hard parts, but need not button.
193.	Puts on shoes	Puts on shoes, not tied.
194.	Feeds alone	Feeds self well alone.
195.	Washes hands	Washes hands unaided acceptably and dries same.

Four Year Olds

196.	Dresses Self	Unfastens and removes and/or replaces and fastens most of his own clothes without help or undue delay. Need not tie laces or put on rubbers on this item. Fastens large buttons.
197.	Use of spoon	Can use spoon effectively.
198.	Use of fork	Can use fork effectively.
199.	Toilets self	Cares for ordinary toilet need without undue assistance. Manages clothing, cleansing (papering) and bathroom facilities acceptable according to conventional routine.
200.	Washes face and hands	Wipes water on face, uses soap on hands and rinses hands. Need not do a perfect job.
201.	Brushes teeth after lunch	Handles toothbrush effectively when given instruction.
202.	Samples food	Will try new foods when served.
203.	Fastens	Buckles, laces, zips, knots with only minor help.
204.	Ties	Ties a bow on shoes.